



Memo

date: February 23, 2005

to: Distribution

from: C. Porretto

subject: Minutes – SMD Self-Assessment – February 2, 2005

Meeting Agenda ([See Attachment](#))

Attendees ([See Attachment](#)) – *Attendees are SMD unless otherwise noted*

M. Harrison, M. Anerella, J. Durnan (HP), G. Ganetis, G. Goode (ES), H. Hocker, E. Lessard (AD), C. Porretto, J. Selva (ES), M. VanEssendelft (ES), P. Wanderer

Meeting Purpose

The Superconducting Magnet Division's Annual Self-Assessment Review was held on February 2, 2005. The format of the meeting was a series of presentations given by Division members, which were structured as a review and critique of an individual element of the program as it is implemented within the Superconducting Magnet Division. The feedback of strengths and opportunities for improvement is an integral part of the continuous improvement cycle.

Topics Discussed

- Division Overview
- FY04 ES&H Review
- EMS Management Review
- Work Planning & Control Review
- FY04 Training Review
- Conclusion

Presentations and Discussions

(Comments by presenters are bulleted. Participants' comments are italicized.)

- **Division Overview – Mike Harrison**

- [Overview Presentation](#)

- This year's meeting would have occurred in December 2004 but was "bumped" because of safety week. This year we will be doing an abbreviated version, without a theme and guest speaker.
 - We are starting to see a change in job mix from FY03, as production lines wind down and R&D and small volume activities increase.
 - There is less use of formal procedures (MAPs and OPMs) for production line process control.
 - Safety topics are being addressed at the Section Head meetings.
 - Erosion of staff is an issue – most people in the admin/management areas must wear more than one hat.
 - We will continue to perform an internal audit of our Work Planning and Control system.
 - We are integrating our EMS and OSH programs with C-AD.

- **FY04 ES&H Review – Jim Durnan**

- [ES&H Presentation](#)

- We are having more Tier I findings due to OSHA inspection and training. Examples of findings that were not previously included are the storage of items in front of electrical panels.

- What is the difference between an OSHA finding and a non-OSHA finding? Non-OSHA findings might be maintenance or environmental issues.*

- DOE will codify penalties for OSHA violations in CFR 831, and in the future can fine us. BNL has always had OSHA in the contract, but soon DOE can fine us. This will be a big change.*

- Tier I examples include blocked exits, and hoists that were not inspected.

- Don't we inspect cranes more than we are required to? There are many small cranes and hoists; for example in Room 30.*

- OSHA fines are based on the potential to cause death; a blocked exit can be a level I, which represents a \$70K fine.*

- Is there any systematic program to put tape on the floor? For electrical panels, yes, but not for exits; on some doors we have placed signs.*

- OSHA findings: there were 427 instances at the Magnet Division; the Division is required to fix 135 of these, of which 120 have already been completed.

So the rest belong to Plant Engineering? Yes, the majority are for cranes (for John Hynan), and blocked electrical panels by building components.

- OHSAS 18001: The Magnet Division is joining efforts with C-AD, which was certified in the pilot program. We have two staff members in the WOSH committee, and Jim Durnan and Chris Porretto attend bi-weekly meetings.

Is it working out okay? So far, so good.

- NFPA 70E: is a standard for electrical safety in the workplace, which the Lab is implementing. It was developed because the National Electric Code, NFPA 70, does not cover worker safety.

Is this a new requirement? It was in SBMS, but hadn't been disseminated to the Lab population yet.

It is new to industry but OSHA is making 70E a requirement. The definition, PPE, and boundaries of working "hot" have changed. The requirements of flash boundaries have changed and DOE is requiring compliance because of the SLAC accident. It's not just the Lab, it's utilities, electricians, etc. Some companies are advanced; we are trying to catch up. DOE will perform a NFPA 70E compliance audit at BNL in April.

There will be several internal audits; has SMD posted panels? We are in the process of implementing 70E with George Ganetis and Jon Sandberg.

Who in Safety and Health Services is leading the effort? Pat Williams and Joe Curtiss, working with the Laboratory electrical safety committee.

How are mechanical technicians involved? They throw switches on cranes.

- Occupational Injuries: the only reportable injury was a chipped tooth.

Did anybody use the first aid kit? One person used a Band-Aid.

- Sports Injuries: there was one sports injury - a technician got his foot caught in the wheel of a bike, but it was not reportable.

- **EMS Management Review – Mel VanEssendelft**

- [Management Review Presentation](#)

- Program Overview: P2C4 is imbedded in the new ESS&H Policy.

Does the web-based system of documentation work? Yes.

- Objectives and Targets: it was noticed that the logbooks for the hoods are not being used regularly. The logbooks are important – they allow us to operate the hoods without a permit.
- Objectives and Targets: a separate P2 opportunity was not evaluated this year as we are taking credit for the can crusher as part of the combined C-AD/SMD EMS Program.
- Objectives and Targets: regarding waste management, there are several areas that could be cleaned up, including the storage shed behind the 902 Annex and the trenches.

- Internal Audit: there was a finding that the PAFs were not reviewed within the prescribed one year period. This year we are on track with the review.
- External Audit: there were two findings – the unlabeled pail of asphalt coating in the satellite accumulation area, and the MAP which did not specify the requirement to mix epoxies under a hood.

Did we ever find out who left the bucket? No.

- There is an issue in Building 903 – the wood block flooring is soaked with oil. This must be listed in the Building FUA to ensure proper disposal during facility decommissioning.
- Hazardous Waste Assessment: there was one finding - that the aerosol cans being collected in a barrel in the satellite accumulation area were not empty, and therefore should be handled as hazardous waste. An aerosol can disposal system is being funded by the Lab; propose using the system jointly for C-AD and SMD.
- Legacy Issue: Cosmotron System – the large tanks, which contained copper, lead, and zinc, were drained after approval was obtained. The day tank contains chromium and cesium, which can be messy; we will have to remove the tanks to a suspect yard.

Are there any compliance issues that would allow the Division to obtain funding? No. Suggest someone talk to Jason and Steve Coleman – items may be regulatory and funding can be obtained.

- Waste Management: actual waste for FY04 was 420 pounds less than FY03; expect trend to continue in FY05.
- Spills: there were two; both were reported properly.
- Record of Decision

Is the EMS Program effective in achieving environmental policy commitments (P2C4)?

Yes.

Are there any different commitments in the new policy? No, it is still P2C4.

There is a bullet in the policy about sustainable development; if we do all the things we are supposed to do, we'll be okay.

Is the EMS Program effective in achieving environmental objectives and performance measures?

Yes.

Is the EMS Program adequate to identify and manage significant environmental aspects, and to identify resource allocations?

Yes.

Are objectives and performance measures suitable to actual environmental impacts, stakeholder concerns, current and future regulatory requirements, and SMD interests?

Yes.

The ISO standard has been changed to include products over which we have influence. This will include magnets produced by the SMD. We will have to consider how we plan to comply with this in the current year.

- **Work Planning & Control Review – Henry Hocker**

- [Work Planning & Control Presentation](#)

- Estimate of work breakdown is 70% by established SOP, 25% as skill-of-the-worker, 5% by work permit. Estimates given are as of assessment date (June 2004).
 - Summary of Logbooks and Permits: the bulk of the work being performed is Plant Engineering maintenance.
 - For the assessment, interviews were conducted with technicians, engineers, and a physicist. The knowledge of work permits was encouraging.
 - Work Planning and Control was discussed in detail during Safety Partnership Week meetings.
 - Procedures and skill-of-the-worker keep the need for work permits low.

Do we expect an increase in the number of logbook entries and a decrease in MAPs this year? Yes, along with an increase in work permits also.

- **FY04 Training Review – Christopher Porretto**

- [Training Presentation](#)

- Monthly training completion percentages have been 98 or 99% for the entire fiscal year.
 - The required annual update of JTAs and employee-to-JTA links was performed.
 - Goal to establish CBT courses for internally-delivered electrical safety courses was not completed.
 - The breakdown of hours spent in training is very consistent with previous years.
 - Average time spent in training per person for the Division (10 hours) was comparable to C-AD (12 hours), and the same as the scientific department average.
 - An opportunity for improvement exists to create the CBT courses for the electrical safety training courses.
 - Upcoming initiatives include OHSAS 18001 awareness training, and rigging training will soon be required for all crane operators.

- **Close Out - Mike Harrison**

- [Close-out Presentation](#)

- Conclusions

- SMD has done a good job with mitigation of OSHA findings.
 - Electrical safety compliance and NFPA 70E – we have to watch this.

- The lessons learned from Ed Sierra indicate that we are behind SLAC; our statistics are similar to SLACs but statistics don't provide an indication of a big event; historically, they are not a good predictor.*

- With only one reportable incident and no DART cases, how do we gauge safety related improvements? We are dealing with the statistics of low numbers.

- Tier I findings are a good indication.
Job Risk Assessments (JRAs) provide perspective.
Discuss issues and action items at weekly meetings.*

- All of our EMS goals have been met. Are we setting the bar too low?

- Annual review of process assessments was late last year; must place emphasis on getting these done; Jim knows where these are at currently.
These must be done before the internal audit on February 14th.*

- There were 40 logbook entries and only two work permits in the 12 months to June 2004. We need to keep our eye on the number of permits compared to the number of log entries. Also, we expect more log entries, if not permits, in the future.

- Keep in mind that many work permits are processed as part of C-AD.*

Dist: Attendees